From: Mardi Klevs

To: Margaret Jones; Dan Hopkins; Larisa Leonova; Thomas Steeger; Melissa Panger; Thomas Moriarty; Carol

Galloway; Don Lott; Brian Joffe

Subject: FYI: Inside EPA article on the American Bird Conservancy study on neonicotinoids

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EPA Faces New Push To Closely Assess Neonicotinoids' Risks To Wildlife

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The American Bird Conservancy (ABC) says preliminary results of a study it is conducting show that EPA is underestimating the aquatic toxicity to birds and other wildlife of the controversial neonicotinoid class of insecticides, adding pressure to the agency to more strictly regulate those products amid concerns over their pollinator risks.

"Based on . . . preliminary results, we have reason to believe that EPA has underestimated the aquatic toxicity of the entire class of neonicotinoid insecticides," Cynthia Palmer, pesticide programs manager at ABC, says in Nov. 14 comments to EPA regarding the agency's registration review dockets for two of the neonicotinoids -- acetamiprid and thiacloprid.

ABC is preparing what it calls "a comprehensive review" about the neonicotinoids' effects on birds and including recommendations to EPA on how to better assess risks of those chemicals. If adopted by EPA, the study's recommendations would serve as yet another change to how the agency conducts its ecological risk assessments for the neonicotinoids. Concerns about the insecticides' toxicity to pollinators and how EPA should assess those risks have risen with EPA registration reviews for those chemicals looming.

While ABC's review will focus on birds, it will also include invertebrates, raising the prospect that the group's study could raise concerns about the chemicals' impacts on pollinating insects beyond those that the agency has already acknowledged.

Neonicotinoids are systemic chemicals, meaning that plants can take them up into their stems, leaves, pollen and nectar. As a result, many environmentalists and beekeepers have argued, pollinating insects such as honeybees may always be exposed. They have complained that EPA's current risk framework fails to account for the neonicotinoids' systemic qualities -- a deficiency the agency has acknowledged and says it will fix as it revises its assessment procedure.

They have also called for banning certain neonicotinoids, including clothianidin, but EPA thus far has rebuffed those calls.

EPA is already planning to update its current, much-criticized pesticide risk assessment framework for pollinators with a new quantitative, tiered approach that could yield more conservative risk estimates for a wide range of substances. EPA has said it https://examework.org/ and the feedback from its Sept. 11-14 Scientific Advisory Panel meeting to inform the agency's planned reviews of all the neonicotinoids.

Now, ABC is seeking to further influence the pending registration review process, saying it "hopes that its scholarly review of neonicotinoid effects on birds will help inform the Agency in its registration review decisions" and urging the agency to "proceed with caution" in the meantime.

Palmer writes that ABC has hired Pierre Mineau, an environmental toxicologist with Environment Canada and an adjunct faculty member at Carleton University in Ottawa, ON, to conduct the group's neonicotinoid review. Mineau will "gather and evaluate the toxicological information for birds as well as terrestrial and aquatic invertebrates, drawing comparisons with other pesticides where warranted," Palmer writes.

Preliminary findings by Mineau suggest that EPA has underestimated certain hazards that the neonicotinoids may pose in certain situations, Palmer writes, namely aquatic toxicity.

Ecological Hazard Assessments

Those findings could put pressure on the agency to make the ecological hazard assessments for those chemicals more conservative. Palmer notes that Mineau also plans to examine exposure, the other component of risk. He will "run risk models to assess exposure and to evaluate the risk of direct and reproductive toxicity to birds. The review will look at the potential for runoff and environmental contamination. It will include examination of insect food abundance and avian reproduction in agricultural lands."

Palmer notes the longtime controversy over the chemicals' alleged effects on pollinating insects, and she writes that her group's review will examine neonicotinoids' effects not just on birds, but also on invertebrates -- a category that includes insects. Thus ABC's review, should it yield further pollinator concerns, could lead to additional calls for changes to EPA's draft pollinator risk framework.

It is not immediately clear whether the ABC study could yield insights for pesticide risk assessment more generally. For instance, EPA has not indicated when it will move forward with a stalled plan to harmonize risk assessment approaches by the agency's water and pesticide offices for determining pesticides' aquatic harms or perhaps to use the method in policy decisions.

ABC did not respond to a request for comment from *Inside EPA*.

To help with the review, ABC seeks "studies that have been submitted to EPA on avian effects and the corresponding data reviews that have been prepared by EPA scientists," Palmer writes. The availability of that data, however, hinges upon EPA granting a Freedom of Information Act (FOIA) request that the group has filed.

Mardi Klevs Chief Chemicals Management Branch Land and Chemicals Division U.S. EPA 77 W. Jackson (LC-8J) Chicago, IL 60604 312-353-5490 fax: 312-385-5528

klevs.mardi@epa.gov